

Maine State Planning Office

Waste Management & Recycling Program



Fact Sheet: Composting with Worms

Composting with worms is an easy method of composting food scraps. You can have a worm box right in your home, office or school. It is also an excellent method for composting in the winter when outdoor compost bins freeze. Of course, worm composting is only a viable option for those of us who don't have an aversion to managing these hardworking creatures!

Worm composting utilizes red wiggler worms, a special variety of worms which are found in manure piles. The red wiggler, much like bacteria, loves to eat organic waste such as manure and food scraps. In fact, two pounds of worms (2,000 worms) can eat approximately 7 pounds of food waste in a week. Regular garden-variety earthworms or crawlers are not well-suited for worm composting.

Composting with worms takes very little space, requires little maintenance, and has no odor since the worms eat the food scraps before they decompose. The end result of worm composting is a rich fertilizer made of worm "castings" or worm manure. The worms themselves are also excellent fishing bait.

To construct a worm bin, you will need: a container that can be covered (a plastic tote bin is excellent); bedding material such as manure or well-rotted compost and shredded newspaper; and, of course, a good handful of red wiggler worms. These worms will quickly multiply and before long all your neighbors and friends will find themselves composting their food scraps with worms. Worms can be dug from a manure pile or mail-ordered through gardening suppliers. Information on sources of worms, bins and additional educational literature is included below and may be obtained from the office.

To start the bin, mix the manure or compost with the shredded newspaper and line the bottom of the container with the bedding material. Proceed to build up the worm population slowly by adding some coffee grounds, tea bags and banana peelings, which seem to be some of their favorite foods. Make sure you don't put in too many scraps at first, because whatever they don't eat will rot. After a few weeks you can begin to slowly increase the amount of food scraps.

From time-to-time, the bedding material might get a little soggy. Shredding some newspapers into the bin until the bedding is fairly dry will take care of the moisture. Worms will eat the newspaper as well. The worm bin should be kept between 40° and 70° F, and therefore cannot be left outside in the winter, or in hot sun. You can leave the bin right in the kitchen where it is convenient to add scraps because there is no odor associated with this process.

Worm bins should be used for food waste only. Yard waste, leaves and grass clippings should be placed in an outdoor compost pile. Feeding citrus rinds, onions, tobacco and hard items such as raw squash, eggshells, or broccoli stems should be avoided, but any other kind of vegetable waste in small pieces will be eaten by the worms. Some people go so far as to chop up food before placing it in the bin, but while it may hasten the process, this is not necessary. Worms will eat meat, but only in very small quantities, so it is best to stick to vegetable matter.

If your worm population gets too large, simply start another bin with half of the worms and give it away to friends or put the worms into your compost pile. To harvest the dark, nutrient-rich worm castings, push all of the contents of your bin to one side and add fresh bedding material and food to the other side of the bin. In a few days the worms will have migrated to the fresh side and you can scoop out the worm castings without getting worms. Also, leaving the cover off for a short while before harvesting the castings will send the worms to the bottom of the container away from light, and you can scoop the castings off the top.

Use the castings as you would any other compost or manure by adding it to your houseplant potting soil, your garden or lawn to enrich the soil.

The office expresses thanks to Linda Burke, former recycling coordinator of Jay, Maine, for her contribution to this fact sheet. Readers are encouraged to examine: Worms Eat My Garbage c. 1982 by Mary Appelhof, published by Flower Press, Kalamazoo, Michigan. (This book is available for loan from the office.)

Sources of Red Worms or Worm Bins:

The Earthworm Company
3675 Caistoga Rd
Santa Rosa, CA 95404

Hugh Carter
Carter Worm Farm
Plains, GA 31780
(912) 824-7707

Gardener's Supply Company
128 Intervale Rd
Burlington, VT 05010
(802) 863-1700

The Philadelphia Worm Co.
PO Box 9586
Philadelphia, PA 19124

Jeffrey Richards
The Original Maine Worm Farm
Rt 1 Box 3945
Norridgewock ME 04957
(207) 634-5621

Seventh Generation
Colchester, VT 05446-1672

Composting systems (with Mary Appelhof's book)

For more information, please contact:

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or visit us online at:

www.recyclemaine.com

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